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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,429	12/16/2003	Robert W. Luffel	10980296-4	8192

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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DAVIS, DAVID DONALD

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/738,429

**Applicant(s)**

LUFFEL ET AL.

**Examiner**

David D. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/16/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. Receipt is acknowledged of the Information Disclosure Statement (IDS) received December 16, 2003.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the third bearing contacting said first elongate gear rack", as required by claim 5 and the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> elongate gear racks, as required by claims 9 and 10, for example, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 11-16 and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Tadokoro et al (US 6.166.877). As per claims 1, 12-14 and 23-26, Tadokoro et al shows in figure 19 a translation apparatus for moving a cartridge access device 2 along a displacement path including a first elongate gear rack 32 aligned along the displacement path. Figure 20 of Tadokoro et al shows the first elongate gear rack 32 having a first end and a second end. Figure 20 also shows a first elongate guide member 8 formed as a single unit with the first elongate gear rack 32 and extending along the displacement path substantially between the first and second ends of the first elongate gear rack 32. *Note: first elongate guide member in and of itself is a single unit. Also, the term "unit" according to The American Heritage® Dictionary is defined as "An individual, **group**, structure, or other entity regarded as an elementary structural or functional constituent of a whole". Emphasis added.*

A first bearing 33, best shown in figure 21 of Tadokoro et al, is mounted to the cartridge access device 2. The first bearing 33 engages the first elongate guide member 8, and a second elongate gear rack 32 is aligned along the displacement path and positioned in spaced-apart relation to the first elongate gear rack 32.

Figure 20 of Tadokoro et al shows the second elongate gear rack 32 having a first end and a second end. Figure 20 also shows a first drive pinion 41 mounted to the cartridge access device 2 with the first drive pinion 41 engaging the first elongate gear rack 32. Figures 20 and

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21 show a second drive pinion 41 mounted to the cartridge access device 2 with the second drive pinion 41 engaging the second elongate gear rack 32.

Pinion drive apparatus 34 shown in figure 20 of Tadokoro et al is operatively associated with the first and second drive pinions 41. The pinion drive apparatus 34 rotates the first and second drive pinions 41 to move the cartridge access device 2 between the first and second ends of the first and second elongate gear racks 32.

As per claims 2 and 15, Tadokoro et al shows in figures 19-22 the first elongate guide member 8 including first and second opposed bearing surfaces with the first bearing 33 mounted to the cartridge access device 2 slidably engaging the first and second opposed bearing surfaces of the first elongate guide member 8. As per claim 3, Tadokoro et al shows in figure 19 the second elongate gear rack including a second elongate guide member 8 that extends along the displacement path substantially between the first and second ends of the second elongate gear rack and wherein the translation apparatus further includes a second bearing 33 mounted to the cartridge access device 2. The second bearing 33 engages the second elongate guide member 8.

As per claims 4 and 16, Tadokoro et al shows in figures 19-22 the second elongate guide member 8 including first and second opposed bearing surfaces and wherein the second bearing 33 mounted to the cartridge access device 2 slidably engages the first and second opposed bearing surfaces of the second elongate guide member 8.

As per claim 11, Tadokoro et al shows in figure 20 the pinion drive apparatus including a motor 34 having a shaft 38. A worm attached to the shaft 38 of the motor 34. A worm gear 39 operatively connected to the first and second drive pinions 41. The worm gear 39 mounted to engage the worm mounted to the shaft 38 of the motor 34.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 5, 6-10 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadokoro et al (US 6,166,877). As per claims 5 and 17, Tadokoro et al shows in figure 20 a third bearing 33 mounted to the cartridge access device 2. As per claims 6 and 18, Tadokoro et al shows in figure 20 the third bearing 33 includes a wheel.

As per claim 7, Tadokoro et al shows in figure 19 a translation apparatus for moving a cartridge access device 2 along a displacement path including a first elongate gear rack 32 aligned along the displacement path. Figure 20 of Tadokoro et al shows the first elongate gear rack 32 having a first end and a second end. Figure 20 also shows a first elongate guide member

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8 formed as a single unit with the first elongate gear rack 32 and extending along the displacement path substantially between the first and second ends of the first elongate gear rack 32. *Note: first elongate guide member in and of itself is a single unit. Also, the term "unit" according to The American Heritage® Dictionary is defined as "An individual, **group**, structure, or other entity regarded as an elementary structural or functional constituent of a whole". Emphasis added.*

A first bearing 33, best shown in figure 21 of Tadokoro et al, is mounted to the cartridge access device 2. The first bearing 33 engages the first elongate guide member 8, and a second elongate gear rack 32 is aligned along the displacement path and positioned in spaced-apart relation to the first elongate gear rack 32.

Figure 20 of Tadokoro et al shows the second elongate gear rack 32 having a first end and a second end. Figure 20 also shows a first drive pinion 41 mounted to the cartridge access device 2 with the first drive pinion 41 engaging the first elongate gear rack 32. Figures 20 and 21 show a second drive pinion 41 mounted to the cartridge access device 2 with the second drive pinion 41 engaging the second elongate gear rack 32.

Pinion drive apparatus 34 shown in figure 20 of Tadokoro et al is operatively associated with the first and second drive pinions 41. The pinion drive apparatus 34 rotates the first and second drive pinions 41 to move the cartridge access device 2 between the first and second ends of the first and second elongate gear racks 32.

Regarding claims 5 and 17, Tadokoro et al, however, is silent as to the third bearing 33 contacting the first elongate gear rack 32 and allowing the cartridge access device 2 to move

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along the displacement path. Regarding claims 7-10 and 19-22, Tadokoro et al, however, is also silent as to 3, 4, 5, 6, 7 and 8 elongate gear racks.

It would have been obvious to a person having an ordinary skill in the art at the time the invention was made to specify that the third bearing of Tadokoro et al contacts, which is well within the purview of a skilled artisan and absent an unobvious result, the first elongate gear rack of Tadokoro et al. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to specify that the third bearing of Tadokoro et al contacts the first elongate gear rack to provide a more stable slidable coupling with the guide member and rack.

It also would have been obvious to a person having an ordinary skill in the art at the time the invention was made to duplicate the elongate gear racks of Tadokoro et al. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to duplicate gear racks, which is well within the purview of a skilled artisan and absent an unobvious result, so that more modules would be able to be added to the translation system.

### ***Conclusion***

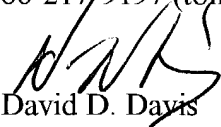
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is (703) 308-1503. The examiner can normally be reached on Monday thru Friday between 9:30-6:00.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David D. Davis  
Primary Examiner  
Art Unit 2652

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